

WHAT IS CLAIMED IS

1. A bowl mill for a coal pulverizer with an air mill for primary entry of air, comprising a substantially closed separator body (2) having a central axis; and a bowl-like grinding table (3) mounted on a shaft (4) rotatable about said central axis, cooperating with a plurality of grinding rolls (6); characterized in that said air mill is provided with multiple entry, double entry (17', 17"; 18', 18"; 21, 25) on the outer wall of said air mill being the variations of multiple entry of hot primary air from the inlets, resulting in better uniformity in air flow around the air mill section and for minimizing formation of eddies and vortices.
2. The bowl mill of claim 1 wherein said multiple entry of primary air comprises double entry annular openings (17', 17"; 18', 18"; 21, 25) are set 180° from one another.
3. The bowl mill of preceding claims, wherein the cross sectional area of each opening of the multiple entry configuration is fraction of the area required in a single entry configuration, the fractional area of each entry being derived by dividing the area required for single entry by the number of entries proposed.
5. The bowl mill of claim 1, wherein two separate sets of inlet ductings are provided leading to said double entry annular openings.

6. The bowl mill of claim 1, wherein said inlet (19) is bifurcated for the primary air to enter the air mill through a first opening (21) and a duct (23) leading to a second opening (25), the two openings being set 180° from one another.
7. The bowl mill of claim 6, wherein a blockage (26) is provided upstream of said second opening (25) so that primary air from the first opening (21) does not create turbulence.
8. The bowl mill of claim 6, wherein the cross section of said duct (23) is gradually decreased upto section (27).
9. The bowl mill of claim 6, wherein for bifurcating the inlet (19) a partition (28) is provided for allowing one half of primary air to flow through first opening (21) and other half through the second opening (25).